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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,146	12/15/2003	Yeong Gyu Lee	2336-228	9304
7590	06/02/2005		EXAMINER	
LOWE HAUPTMAN GOPSTEIN GILMAN & BERNER, LLP Suite 310 1700 Diagonal Road Alexandria, VA 22314			WONG, ERIC K	
			ART UNIT	PAPER NUMBER
			2883	

DATE MAILED: 06/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/734,146	LEE ET AL.
	Examiner Eric Wong	Art Unit 2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

1) Responsive to communication(s) filed on 15 December 2003.  
 2a) This action is FINAL.                            2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

4) Claim(s) 1-18 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-18 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on 15 December 2003 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
 1. Certified copies of the priority documents have been received.  
 2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

**DETAILED ACTION**

***Priority***

1. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d).

***-Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
3. Claims 1-9, and 11-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's disclosure of prior art in view of United States Patent Application 2004/0151441 to Bennett et al.

As to claims 1-3, 11 and 18, Applicant's disclosure of prior art indicates a MEMS chip with a boot fit over an optical fiber to hermetically seal the device in a housing, but fails to explicitly disclose a base and an upper housing.

Bennett et al. discloses a hermetically sealed opto-electronic component having a plug over an optical fiber and an upper housing with a port opened downward with an opened bottom placed on a base to form a internal space in order to properly align components.

It is respectfully noted that the rearrangement of parts involves only routine skill in the art.

Since Applicant's disclosure of prior art and Bennett et al. are both from the same field of endeavor, the use of an upper housing and base in Applicant's disclosure of prior art would have been recognized in the pertinent art of said disclosure.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use the upper housing and base disclosed by Bennett et al. in Applicant's disclosure of prior art in order to properly align components and to minimize optical transmission errors.

As to claims 5-7 and 13-15, the boot is secured and bonded to the housing. However, the methods of forming such a bond is not germane to the issue of patentability of the device itself. Therefore, these limitations have not been given patentable weight.

Claims 4, 8-9, 12, and 16-17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's disclosure of prior art in view of Bennett et al. as applied to claim 1 above.

Applicant's disclosure of prior art in view of Bennett et al. includes a MEMS switch with a hermetically sealed housing and a boot. However, a boot made from an elastic material and a housing made of ABS or PC is not disclosed.

It is respectfully noted that such a boot disclosed by Applicant would be made from an elastic material in order to provide flexibility and a housing made from ABS or PC for strength.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a elastic material for a boot and ABS or PC for the housing, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

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4. Claims 10 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's disclosure of prior art in view of Bennett et al. as applied to claim 1 above in further view of United States Patent Application Publication 2003/0202766 to Medalsy et al.

Applicant's disclosure of prior art in view of Bennett et al. includes a MEMS switch with a hermetically sealed housing but fails to explicitly disclose a housing with a protrusion extending downward to a base with a protrusion receiving portion.

Medalsy et al. discloses a sealed optical component package with protruding screws from an upper housing to a base with a protrusion receiving portion.

Since the Applicant's disclosure of prior art, Bennett et al. and Medalsy et al. are from the same field of endeavor, the use of protruding screws disclosed by Medalsy et al. would have been recognized in the pertinent art Applicant's disclosure in view of Bennett et al.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the protruding screws disclosed by Medalsy et al. in the optical component of Applicant's disclosure of prior art in view of Bennett et al. in order to (and with the motivation to) strengthen the seal and to make the housing easily removable.

### *Conclusion*

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. United States Patent Application Publication 2005/0058411 to Finot et al. for a laser welded housing.
- b. United States Patent Application Publication 2004/0141697 to Hubnet for a sealed optical component.

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c. United States Patent Number 5,344,337 to Ritter for a connector with a rubber boot.

d. United States Patent Number 4,170,424 to Boehm for a rubber o-ring seal.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Wong whose telephone number is 571-272-2363. The examiner can normally be reached on Monday through Friday, 830AM - 430PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on 571-272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



EW



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